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FACULTY WORKING  
PAPER NO. 1264

Escalating Commitment: Effects  
of Conflicting Expert Advice

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## ABSTRACT

Escalating commitment in organizations occurs in decisions involving ambiguous information. In such decisions, experts often provide analysis and recommendations for action which may increase the tendency toward escalating commitment. Devil's advocacy is a technique for counteracting this process.

In this paper, Staw's (1976) escalating commitment task is used to examine the effects of an expert report and a devil's advocate treatment on the tendency to escalate commitment. Results show that an expert report increases dollar allocations to a failing project and subjects' estimates of the project's probability of success. A devil's advocate critique appeared to reduce the effects of the expert report though the results were only marginally significant.



## INTRODUCTION

Those who must decide whether to make further resource commitments to a faltering course of action can generally find arguments both for and against escalation of commitment. Often the information they must use to make the decision is incomplete, possibly biased, and ambiguous. Under these conditions, recommendations by perceived experts may help to reduce uncertainty and may therefore influence decision outcomes and increase commitment (Schwenk, 1985a).

This paper deals with the role of expert reports in the promotion of commitment and the question of whether a devil's advocate treatment can reduce the effects of expert reports. Past research on escalating commitment will be reviewed and the ways experts may promote escalating commitment will be discussed. Next, the role of devil's advocacy in reducing escalating commitment will be considered. Hypotheses on the effects of expert reports and devil's advocacy will be developed on the results of an experiment to test these hypotheses will be described. The implications of the results will be discussed in the concluding section.

### Escalating Commitment and Entrapment

A brief review of the research on escalating commitment and entrapment will serve to clarify the nature of the phenomena. Many important organizational projects involve an initial commitment of resources (time, effort, money, etc.) followed by failure and a need for additional commitment which may save the venture. In such situations decision-makers must determine whether or not to commit the extra

resources and risk "throwing good money (or effort) after bad." Examples provided by Hall (1982) and Staw (1981) show that individuals, businesses, and countries sometimes continue to commit resources to failing projects long past the point when such commitment seems reasonable to outside observers.

Staw (1981) has summarized several studies dealing with such "escalating commitment" and used them to develop a theoretical model of the variable affecting the commitment process. Staw (1976) used a business case in which study participants play the role of a corporate financial officer who is asked to allocate research and development funds to one of two operating divisions of a company. Subjects were then given feedback on their initial decision (either positive or negative, indicating success or failure) and asked to make a further allocation of R&D funds. Staw (1976) found that more funds were allocated after failure than after success when subjects were personally responsible for the initial commitment decision. Three subsequent studies used similar laboratory tasks (Staw and Fox, 1977; Staw and Ross, 1978; Fox and Staw, 1979).

Conlon & Wolf (1980), using Staw & Ross's (1978) development loan task, collected information on the problem-solving strategy of subjects. They found that subjects using a calculating strategy responded differently to information on the likelihood of the cause of the initial failure persisting into the future than did subjects who used a non-calculating strategy. Calculators did not retain as much commitment as non-calculators in the face of information indicating a

long term cause of failure. This suggests that the way decision-makers frame and approach a decision may determine the likelihood they will escalate commitment.

Another line of research, on entrapment, deals with a process which is fundamentally the same as escalating commitment (Brockner and Rubin, 1984). Brockner, Shaw, and Rubin (1979) showed that subjects invested more when they had to make an explicit decision to terminate a series of investments than when the series was self-terminating. They also invested less if they set a limit on their investment and informed the experimenter of it before the experiment began.

Brockner, Rubin, and Lang (1981) found that entrapment was greater when subjects were informed of the advantages of investing a large amount than when they were given the virtues of investing conservatively. Social anxiety and the presence of an audience also lead to greater entrapment. Brockner, Fine, Hamilton, Thomas, and Turetsky (1982) investigated the notion that factors like the presence of an audience and information about costs have different impacts at different stages in the entrapment process. They found that cost information had effects on degree of entrapment when the information was introduced early in the process. The perceived presence of an audience affected entrapment when the audience was introduced late in the process.

#### The Role of Experts in Escalating Commitment

Since escalating commitment tends to occur in situations in which information is ambiguous, expert statements may provide direction and

help reduce ambiguity. In this way, escalating commitment on the part of experts or organizational leaders who employ them may be transmitted to others in the organization.

The research on escalating commitment has not explicitly addressed the promotion of commitment by experts. However, there is indirect evidence that experts' statements may increase this tendency toward escalation.

Fox and Staw (1977) conducted an experiment in which they used Staw's (1976) decision case and gave some subjects a statement indicating that there was a high likelihood additional R&D funding would help the company's financial condition while other subjects received a statement indicating a low likelihood. They found that subjects in the first treatment condition committed significantly more money than those in the second treatment condition during the first of a series of financial allocation decisions. Staw & Ross (1978) used a laboratory task involving a loan for a development project which had experienced a setback and gave subjects different statements regarding the cause of the setback. Subjects allocated more funds when the indicated cause was exogenous to the program (unlikely to persist into the future) than when there was an endogenous cause (one likely to continue). They also responded more strongly to this information after failure than after success.

Experts in organizations may influence decision-makers' interpretations of negative performance or performance downturns. Since their reports serve to structure ambiguous data, they may cause contributors to overestimate the likelihood that increased commitment will improve



the situation (Fox and Staw, 1977), and to attribute failures to exogenous causes (Staw and Ross, 1978). They may also cause contributors to use a noncalculating strategy (Conlon & Wolf, 1980), to neglect investment limits (Brockner et al., 1979), to consider the advantages of investing large amounts (Brockner et al., 1981), and to ignore information about costs (Brockner et al., 1982).

The material previously discussed suggests the following hypothesis:

H<sub>1</sub>: Decision-makers given an expert report recommending increased investment will invest more money and express more confidence in a failing course of action than those not given such a report.

#### Devil's Advocacy and Escalating Commitment

To reduce the possible negative effects of expert reports on decisions, it is desirable to bring multiple conflicting views to bear on a decision (Schwenk, 1985b). One technique for doing this is devil's advocacy. This technique involves the development of a critique of the course of action advocated by an expert and the presentation of the critique along with the expert's plan. Schwenk (1985b) discusses the alternative approaches to devil's advocacy as well as the laboratory and field research on its effectiveness. It has been shown to reduce the impact of expert reports and improve decision-making in a variety of tasks (Cosler, Ruble, and Aplin, 1978; Schwenk, 1982; Schwenk, 1984a). Schwenk (1985c) and Schwenk and Thomas (1983) have suggested that devil's advocacy should reduce the effects of decisional biases which may lead to escalating commitment. However, this proposition has not been tested experimentally.

The material previously discussed suggests the following hypothesis:

H<sub>2</sub>: Decision-makers given a devil's advocate critique in addition to an expert report recommending increased investment will invest less money in a failing course of action than those given the expert report alone.

#### METHOD

A laboratory experiment was conducted using the A&S case which is a financial decision task used in many previous experiments on escalating commitment (Staw, 1976 and 1981; Staw and Fox, 1977). This is a business case which describes a company with two operating divisions (consumer products and industrial products). Subjects play the role of a corporate financial officer who's duty it is to allocate research and development funds to one of these two divisions. After making the initial allocation, subjects receive feedback in the form of statistical data on sales growth and profitability for both of the divisions for a three-year period following the initial allocation. Subjects are then informed that \$20 million in R&D funds is available to them to allocate to the previously funded division or to reserve for other uses. Subjects then decide how much they will allocate to the previously funded division and fill out a post-task questionnaire.

One hundred twelve business school undergraduates participated in the experiment. In addition to choosing one of the two divisions for the initial allocation and selecting a dollar amount for the second allocation, subjects were asked to provide their probability of positive net profits for the next three years with the additional allocation they had just made.

### Treatment Conditions

Twenty-eight subjects were randomly assigned to each of four treatment conditions. The first two treatment conditions duplicated those found in Staw's (1976) study. Experimental materials were obtained from Staw to insure that the treatments were the same. In the first condition, after their initial choice of the industrial or consumer products divisions for additional R&D funding, subjects received feedback indicating their chosen division had achieved increased profitability and sales. This was essentially "success" feedback.

In the second treatment condition, subjects received feedback indicating that their chosen division had sustained increasing losses and that top management was displeased with the division's performance. This constituted "failure" feedback.

In the third condition, in addition to failure feedback, subjects received a report from "an advisory committee at the A&S company" which contained an analysis suggesting that the company's losses were due to insufficient funding and that more money should be committed to this division.

In the fourth condition, subjects received all the materials given to the subjects in the third treatment condition. In addition, they were given a report from "a second planning committee at the A&S company" which questioned the assumptions in the first committee's analysis and the recommendation that more money should be allocated to the division. The combination of the expert report and the critique represents the essential feature of the devil's advocate approach as it was used in several previous experiments (Cosier et al., 1978; Schwenk, 1982, 1984a, 1985b).

## RESULTS

### Manipulation Checks

In order to determine whether the subjects carefully read the advisory committee recommendations, they were asked to indicate on a post-task questionnaire the type of recommendations they received.

They were given three choices:

- 1) a single set of recommendations
- 2) two different and conflicting sets of recommendations
- 3) two sets of recommendations which were basically the same.

Eighty-nine percent of the subjects given the Expert Committee Report and ninety-three percent of subjects given the Devil's Advocate treatment correctly identified the treatment they received.

In addition, subjects were asked to indicate using a six-point scale, the extent of their agreement with the statement, "Investing in research and development is clearly not the way for this company to improve sales and earnings." A one-way ANOVA on subjects' responses to this question indicated that the differences were significant ( $F = 4.35$ ,  $p < .005$ ). Duncan multiple range tests showed that subjects given the failure feedback only expressed more agreement with this statement than those given the success feedback ( $p < .05$ ) and those given the failure feedback with the report ( $p < .01$ ). Those given the devil's advocate treatment expressed more agreement with this statement than those given success feedback ( $p < .05$ ) and those given failure feedback with the expert report ( $p < .05$ ). These results show that the expert and devil's advocate treatments had the intended effects on subjects' confidence in the efficacy of increased investments.

### Dollar Commitment and Probability of Success

Table 1 summarizes the results of the experiment with respect to the two major variables examined. One-Way ANOVAs showed that the differences due to treatments were significant for Dollar Commitments ( $F = 5.73$ ,  $p < .001$ ) and for Probability of Success ( $F = 6.11$ ,  $p < .001$ ). Subsequent Duncan Multiple Range tests showed that subjects given the failure feedback with the expert report recommending reinvestment committed significantly more money than those given failure feedback only ( $p < .001$ ) and significantly more than those given the success feedback ( $p < .05$ ). Thus the results of the experiment provide support for Hypothesis 1. Those given the devil's advocate treatment invested significantly more than those given failure feedback only ( $p < .05$ ), and less than those given the experts report, though this difference was only marginally significant ( $p < .10$ ). Thus the results provide marginal support for Hypothesis 2.

Duncan Multiple Range tests dealing with subjects' probability of success showed that those given only success feedback gave a higher probability of success than those given only failure feedback ( $p < .001$ ) and those given the devil's advocate treatment ( $p < .01$ ). Those given the failure feedback plus the expert report gave a higher probability of success than those given the failure feedback only ( $p < .05$ ). Thus, the results provide support for Hypothesis 1. Those given the expert report gave a higher probability of success than those given the devil's advocate treatment though this difference was only marginally significant ( $p < .10$ ).

One interesting finding is the failure to replicate Staw's original escalating commitment effect. Subjects given the success feedback



invested more than those given the failure feedback, though this difference was only marginally significant ( $p < .10$ ).

#### DISCUSSION

The failure to replicate Staw's original results in this experiment requires some explanation. Given the fact that the experimental materials were provided by Staw, and the experiment was conducted at the same university in which the original Staw (1976) experiment was done, the results are somewhat surprising. However, other recent research has also failed to demonstrate escalation of commitment using this same task. Singer and Singer (1985) used a task in which "The exact experimental procedures of Staw's (1976) high responsibility and negative feedback condition were followed" (1985, p. 817). In other words, their treatment condition was the same as the "Failure Feedback Only" condition in this experiment. They found that subjects' mean allocation was \$9.27 million which is much closer to the dollar allocation for the Failure Feedback condition in this experiment (\$8.89 million) than it is to Staw's original results for this treatment condition (13.07 million). Bateman (1983) conducted an experiment using the A&S decision case and found no significant difference between dollar allocations for subjects in the success and failure condition.

Since the materials used in these experiments were similar if not identical to those used by Staw, it is likely that the failure to replicate Staw's results is due to differences in subjects. It may be that the declining fortunes of business since Staw's original experiment has made students less optimistic about the possibility that initial performance declines can be reversed and less willing to



continue investment. Or, it may be that business school students are now more attuned to financial performance measures in making decisions because of differences in business education between the mid 1970s and the present time. These explanations, and others, should be investigated in future research.

However, this experiment has shown that escalating commitment can be promoted by an expert report recommending increased investment. The effect of the expert report was so strong that subjects given the failure feedback and the expert committee report invested more than those given success feedback. This testifies to the power of an expert report when decision-makers are operating in an ambiguous environment.

The results of this experiment provide marginal support for the suggestions of Schwenk (1985c) and Schwenk and Thomas (1983) that devil's advocacy may reduce the tendency toward escalating commitment. Schwenk (1985c) has suggested that devil's advocacy should reduce escalating commitment because it diminishes the effects of decisional biases which produce such commitment. Further, devil's advocacy has been shown to reduce the effects of expert advice in many different types of decisions (Cosier et al., 1978; Schwenk, 1982, 1984a, 1985b). Given these facts, it was expected that the devil's advocate treatment would have stronger effects in this experiment. However, the marginally significant effect for the devil's advocacy supports the proposition that devil's advocacy may somewhat weaken the effects of an expert report encouraging escalating commitment. Future research should examine more closely the effects of expert reports and devil's advocacy on subjects' decision-making and information processing, perhaps through the use of protocol analysis.

The expert report did not increase subjects' probabilities of success as much as commitment. However, it did have a moderate effect which was reduced to some extent by devil's advocacy. Not surprisingly, subjects receiving the success feedback expressed the highest probability of success, though they did not allocate the greatest amount of money. Subjects given the failure feedback with the expert report gave the second highest probability of success. Though the difference between this group and the group receiving the devil's advocate treatment was only marginally significant, this result provides support for the claim that devil's advocacy may reduce the confidence which accompanies escalating commitment.

Devil's advocacy reduces confidence as well as reducing the tendency toward escalating commitment. Thus, it may reduce commitment to a mistaken course of action but it may also reduce the confidence necessary for a sound course of action to succeed. Some support for this speculation was provided by Schweiger, Sandberg, and Ragan (forthcoming) who showed that decision-makers in groups given a devil's advocate treatment expressed less acceptance of the groups' decisions than those in groups given a treatment designed to promote consensus. Thus, devil's advocacy appears to have complex effects which may both help and hinder effective decision-making. Future research should deal with the effects of devil's advocacy on confidence in a course of action as well as commitment to it.

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TABLE 1

Means and Standard Deviations for  
Dollar Commitments and Probabilities of Success

	Dollar Commitment (in millions)		Probability of Success	
	Mean	Standard Deviation	Mean	Standard Deviation
A) Success Feedback Only	11.25	3.83	.80	.13
B) Failure Feedback Only	8.89	5.27	.60	.26
C) Failure Feedback with Expert Report	14.21	5.05	.74	.18
D) Failure Feedback with Devil's Advocate Treatment	12.00	5.12	.64	.20

Dollar Commitment

Probability of Success

C &gt; B\*\*\*\*

C &gt; A\*\*

D &gt; B\*\*

A &gt; B\*

C &gt; D\*

A &gt; B\*\*\*\*

A &gt; D\*\*\*

C &gt; B\*\*

C &gt; D\*

\* p &lt; .10

\*\* p &lt; .05

\*\*\* p &lt; .01

\*\*\*\* p &lt; .001













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